

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method of recognizing an image of a nozzle hole, comprising:

~~picturing~~ causing a strobe to intermittently emit light to a nozzle hole of a liquid droplet ejection head in a state of being filled with a function liquid to thereby perform image recognition thereof; and

~~wherein the nozzle hole is pictured~~ synchronously with the intermittent emitting of light from the strobe, applying with application of a driving waveform to the liquid droplet ejection head, the driving waveform causing single-period micromotion of a meniscus surface of the nozzle hole; and

~~wherein the picturing~~ image recognition is only performed when the strobe emits light and the strobe only emits light at a timing in which the meniscus surface is pulled into an inside of the nozzle hole due to the driving waveform.

2-3. (Cancelled)

4. (Currently Amended) A method of correcting a position of a liquid droplet ejection head, comprising:

~~the a~~ step of recognizing an image of a position of a nozzle hole of a liquid droplet ejection head by using the method of recognizing an image of a nozzle hole according to claim 1; and

~~the a~~ step of correcting positional data of the liquid droplet ejection head based on a result of recognition in the recognizing step.

5. (Currently Amended) A method of inspecting a nozzle hole comprising:

causing a strobe to intermittently emit light to picturing a nozzle hole of a liquid droplet ejection head in a state of being filled with a function liquid to ~~thereby~~ check a ~~presence or absence of~~ foreign matter adhered thereto; and

~~wherein the nozzle hole is only pictured at a timing when a~~ applying a driving waveform is applied to the liquid droplet ejection head to pull and a meniscus surface of the nozzle hole to an ~~is pulled inside thereof,~~

wherein the check for foreign matter is only performed when the strobe emits light and the strobe only emits light at a timing in which the meniscus surface is pulled into the inside of the nozzle hole due to the driving waveform.

6. (Currently Amended) The method of inspecting a nozzle hole according to claim 5, wherein the liquid droplet ejection head has a plurality of the nozzle ~~head~~holes, and the method further ~~comprising~~comprises:

~~the a~~ step of ejecting, for inspection, a function liquid from all ~~of~~ nozzle holes of the liquid droplet ejection head toward an inspection area; and

~~the a~~ step of determining a defective nozzle ~~for determining a nozzle hole~~ by identifying one of the nozzle holes with poor ejection, based on a result of ejection in the inspection area,

wherein, after the step of determining the defective nozzle, the one nozzle hole with poor ejection is pictured as ~~a nozzle hole to be made~~ an object of inspection, by applying the driving waveform to the liquid droplet ejection head.

7-13. (Cancelled)